## HYDROCHARIS MORSUS-RANAE (HYDROCHARITACEAE): NEW TO THE UNITED STATES

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The European Frogbit, *Hydrocharis morsus-ranae* L., is an alien aquatic vascular plant previously reported from North America only in Ontario and Quebec, Canada. Minshall (1940) stated that the species was introduced in 1932 to the Arboretum at the Central Experimental Farm, Ottawa, from Zurich, Switzerland. By 1936 the plants covered a very shallow small pond in the Arboretum, and three years later they had escaped into the Rideau Canal. Dore (1968), after making extensive field surveys to document the expansion of its range, showed that by 1967 Frogbit had spread downstream in the Rideau River wastershed, the Ottawa River, and the St. Lawrence River at and below Lake St. Louis.

In the United States, two colonies of Hydrocharis morsus-ranae have recently been discovered along the St. Lawrence River in New York. Specimens from the first locality were obtained on 13 September 1974, just south of Ogdensburg, St. Lawrence County (F. M. Uhler s.n., NYS) and from the second on 10 September 1979, at Kring Point State Park, about 10 miles east of Alexandria Bay, Jefferson County (M. L. Roberts 5133, NYS, OS, PH). At the latter locality large mats of the plants were growing in water two to three feet deep. Associated species were Ceratophyllum demersum, Lemna trisulca, Myriophyllum spicatum, Potamogeton perfoliatus, and Vallisneria americana. The plants in the St. Lawrence River probably have spread from populations in the Rideau Canal. This canal system enters the St. Lawrence River and the eastern end of Lake Ontario only 35 miles west of (upstream from) Kring Point. Dore (1968) suggested that the canal system would be a very susceptible avenue to the rapid spread of aquatic weeds. At that time, H. morsus-ranae occurred in the canal only on the Ottawa River side of the canal summit. The species has not only spread into the St. Lawrence River, but it has also appeared about 14 miles inland, where plants have been obtained from a pond at a New York Department of Environmental Conservation wetlands preserve, between Rensselaer Falls and DeKalb Junction, St. Lawrence County (15 June 1977, R. S. Mitchell & K. Dean 6032, NYS). Additional spreading of the plants is to be expected on the Lake Ontario side of the canal summit.

## LITERATURE CITED

DORE, WILLIAM G. 1968. Progress of the European Frog-bit in Canada. Canad. Field-Naturalist 82: 76-82.

MINSHALL, W. H. 1940. Frog-bit—Hydrocharis morsus-ranae L.—at Ottawa. Canad. Field-Naturalist 54: 44-45.

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